

**CLAIMS**

1. Fastening apparatus with indirect firing, by means  
5 of which a fastening element is driven into a support  
material under the action of propellant gases from an  
explosive charge via a piston (2) mounted so that it can  
move in a barrel (3), between a firing position and a  
fastening position, and a plug guide (5) in which a piston-  
10 braking ball (6) mechanism is mounted, exerting a radial  
force on the piston (2), and comprising means (7) arranged  
to modulate the radial force of the balls (6), depending on  
the relative displacement of the barrel (3) and of the piston  
(2), between a maximal force when the piston (2) moves  
15 forward in the barrel (3), and a non-null minimal force when  
the piston (2) moves back, apparatus characterized by the  
fact that the balls (6) are restrained radially by clamping  
lever arms (7) for modulating the radial action of the balls  
(6), mounted so that they can pivot on the plug guide (5)  
20 under the force of the balls (6) rolling on the arms (7).

2. Apparatus according to Claim 1, in which the  
lever arms (7) are also arranged in order to exert a  
rearward axial return force on the balls (6), should the  
25 latter (6) move forward.

3. Apparatus according to one of claims 1 and 2, in  
which the balls (6) are arranged in order to roll on the  
arms (7) between retaining fingers (71) at the end of the  
30 arms (7), away from elbows (72) for pivoting the lever arms  
(7), and a radial abutment edge (11) of the plug guide (5)  
which lies between the pivoting elbows (72) and the  
retaining fingers (71) of the arms (7).

4. Apparatus according to one of Claims 1 to 3, in which the lever arms (7) are mounted so that they can pivot against the force from a resilient o-ring (8).

5 5. Apparatus according to one of Claims 1 to 4, in which the radial thickness of the lever arm (7) decreases rearwards.